

REMARKS

The issues outstanding in the Office Action mailed March 17, 1999, are the Requirement for Restriction and the rejections under 35 U.S.C. §112, §102 and §103. Reconsideration of these issues, in view of the following discussion and the attached Declaration under 37 C.F.R. §1.132, is respectfully requested.

Requirement for Restriction

At page 2 of the Office Action, it is stated that applicants' traversal "is on the ground(s) that the non-elected claims will ipso facto be allowable if the product claims are found to be allowable." While this is true in part, and applicants appreciate the examiner's indication that the subject matter of group II will be rejoined once the catalyst claims are found allowable, it is submitted that this is not the only basis for applicants' traverse of the restriction. In particular, it is maintained that the Restriction Requirement fails to take into account the fact that the claims of group II are related to the claims of group I as combination to sub-combination. This basis for withdrawal of the Restriction Requirement is discussed at page 2 of applicants' traversal of February 1, 1999. Accordingly, the traversal is maintained.

Rejections Under 35 U.S.C. §112

Claims 2-5, 9 and 10 have been rejected under 35 U.S.C. §112, second paragraph. Reconsideration of this rejection is respectfully requested.

Applicants appreciate the examiner's helpful suggestions at the bottom of page 2 of the Office Action. Appropriate typographical and grammatical changes have been made to the claims, and withdrawal of the rejection is respectfully requested.

Rejection Under 35 U.S.C. §102 and §103

Claims 1-16 and 11-17 have been rejected under 35 U.S.C. §102(b), or, in the alternative, §103 over Casci et al. '754. Reconsideration of this rejection is respectfully requested.

Casci discloses zeolite EU-1, with varying silicon to aluminum ratios. (It is noted that Table 4 discloses silica to alumina ratio, which must be adjusted to make a comparison on the atomic basis. The atomic ratios are therefore about one-half of the silica to alumina ratios, for example, in Table 4.)

As noted at page 3 of the Office Action, Casci fails to disclose removal of alumina (or "T") atoms from the framework, instead disclosing ratios attributable to as-synthesized zeolites. It is respectfully submitted that, contrary to the indication in the Office Action, there is a difference between a zeolite having the Si/T ratio resulting from direct synthesis versus one having a ratio resulting from the removal of T atoms. This is clearly demonstrated in the Declaration.

The attached Declaration under 37 C.F.R. §1.132 compares a catalyst C4 of Example 4 herein, having a ratio of Si/Al of 59.7, obtained by dealumination of a starting material having a global atomic ratio of 17.5. This material is compared against the zeolite prepared in Casci's Example 5, having a Si/Al ratio of about 60, as synthesized. These catalysts are compared in a catalytic dewaxing process, and it is shown that a substantially improved pour point and oil yield (each about 4%) is achieved for the catalyst of the invention versus that of the prior art, having the same silicon to aluminum ratio, but differing by method of preparation. It can therefore be seen that the presently claimed catalysts, defined in terms of their process of preparation, are not the same as those of, e.g., Casci. Withdrawal of the rejection under 35 U.S.C. §102 is therefore respectfully requested.

With respect to the portion of the rejection under §103, it is submitted that there is simply no motivation for one of ordinary skill in the art to deviate from the preparation methods disclosed in Casci, by producing a zeolite due to dealumination processes instead of syntheses processes. As such, it is submitted that the portion of the rejection under §103 should also be withdrawn. It is further submitted that the unexpected results shown in the Declaration further evidence patentability in this aspect.

Claims 1-17 have also been rejected under 35 U.S.C. §103 over Casci et al '754 taken with Kuehl et al. '243. Reconsideration of this rejection is also respectfully requested. It is submitted that the foregoing discussion of the Declaration obviates this rejection as well. Moreover, while Casci discloses, at column 2, lines 64-66, that he believes that zeolite EU-1 is

Casci discloses zeolite EU-1, with varying silicon to aluminum ratios. (It is noted that Table 4 discloses silica to alumina ratio, which must be adjusted to make a comparison on an atomic basis. The atomic ratios are therefore about one-half of the silica to alumina ratios, for example, in Table 4.)

As noted at page 3 of the Office Action, Casci fails to disclose removal of alumina (or "T") atoms from the framework, instead disclosing ratios attributable to as-synthesized zeolites. It is respectfully submitted that, contrary to the indication in the Office Action, there is a difference between a zeolite having the Si/T ratio resulting from direct synthesis versus one having a ratio resulting from the removal of T atoms. This is clearly demonstrated in the Declaration.

The attached Declaration under 37 C.F.R. §1.132 compares a catalyst C4 of Example 4 herein, having a ratio of Si/Al of 59.7, obtained by dealumination of a starting material having a global atomic ratio of 17.5. This material is compared against the zeolite prepared in Casci's Example 5, having a Si/Al ratio of about 60, as synthesized. These catalysts are compared in a catalytic dewaxing process, and it is shown that a substantially improved pour point and oil yield (each about 4%) is achieved for the catalyst of the invention versus that of the prior art, having the same silicon to aluminum ratio, but differing by method of preparation. It can therefore be seen that the presently claimed catalysts, defined in terms of their process of preparation, are not the same as those of, e.g., Casci. Withdrawal of the rejection under 35 U.S.C. §102 is therefore respectfully requested.


With respect to the portion of the rejection under §103, it is submitted that there is simply no motivation for one of ordinary skill in the art to deviate from the preparation methods disclosed in Casci, by producing a zeolite due to dealumination processes instead of syntheses processes. As such, it is submitted that the portion of the rejection under §103 should also be withdrawn. It is further submitted that the unexpected results shown in the Declaration further evidence patentability in this aspect.

Claims 1-17 have also been rejected under 35 U.S.C. §103 over Casci et al '754 taken with Kuehl et al. '243. Reconsideration of this rejection is also respectfully requested. It is submitted that the foregoing discussion of the Declaration obviates this rejection as well. Moreover, while Casci discloses, at column 2, lines 64-66, that he believes that zeolite EU-1 is

"similar" to ZSM-23, such is insufficient to suggest to one of ordinary skill in the art that various preparation processes for ZSM-23, e.g., dealumination, would also produce beneficial results with EU-1. Indeed, it is now recognized that EU-1 does not have the structure of ZSM-23, but instead belongs to the "EUO" structural type, while ZSM-23 belongs to the "MTT" structural type. On information and belief, there are no EUO-type zeolites disclosed in Kuehl. Kuehl teaches that dealuminated zeolites show improved performance in catalytic cracking, but the above-discussed unexpected improvement in catalytic dewaxing could not be expected for EU-1. Withdrawal of this rejection is therefore also respectfully requested.

The claims of the application are submitted to be in condition for allowance. However, if the Examiner have any questions or comments, he is cordially invited to telephone the undersigned at the number below.

Respectfully submitted,



Harry B. Shubin, Registration No. 32,004
Attorney for Applicants

MILLEN, WHITE, ZELANO & BRANIGAN, P.C.
Arlington Courthouse Plaza I, Suite 1400
2200 Clarendon Boulevard
Arlington, Virginia 22201
(703) 812-5306 (Direct Dial)
Internet Address: shubinh@mwzb.com

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